

DESCRIPTION

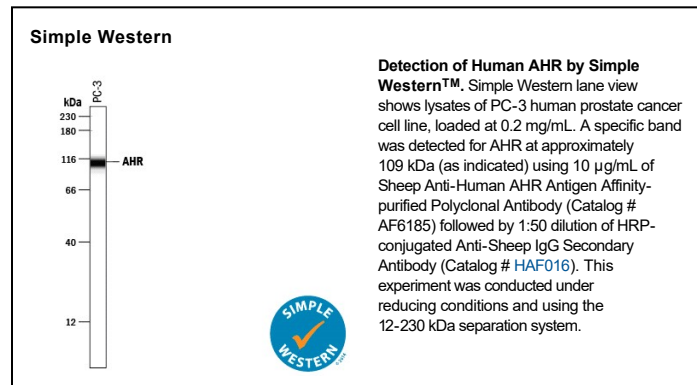
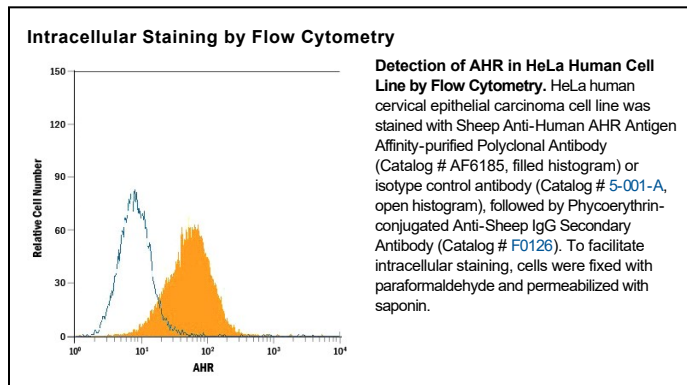
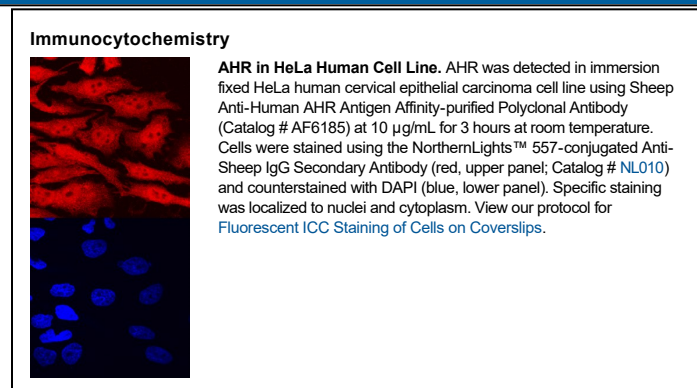
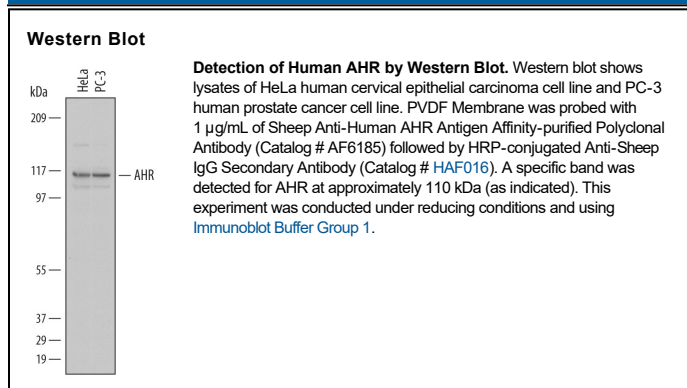
Species Reactivity	Human
Specificity	Detects human AHR in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human AHR Asn704-Leu848 Accession # P35869
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Simple Western	10 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

AHR (Aryl-hydrocarbon receptor; also known as bHLHE76) is a 110 kDa member of the bHLH/PAS transcription factor family. It is widely expressed (breast, lung, liver), and serves many functions. First, it binds multiple xenobiotic chemicals in the cytoplasm. This induces dimerization with ARNT, translocation to the nucleus, and activation of P450 genes such as CYP1A1 and UGT1A6. Second, it appears to block cell cycle progression, possibly via a down-regulation of CDK proteins. And third, it blocks apoptosis by interacting with E2F1, thus silencing TP73 and Apaf1 genes. Human AHR is 848 amino acids (aa) in length. It contains a 10 aa prosegment, plus a 838 aa mature molecule that contains a DNA binding motif (aa 13-40), a bHLH region (aa 41-81), and two PAS domains (aa 111-342). Over aa 704-848, human AHR shares 70% aa identity with mouse AHR.